Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act	)	GN Docket No. 10-159

To: The Commission

COMMENTS OF CTIA–THE WIRELESS ASSOCIATION®

Michael F. Altschul
Senior Vice President, General Counsel

Christopher Guttman-McCabe
Vice President, Regulatory Affairs

Brian M. Josef
Director, Regulatory Affairs

CTIA–THE WIRELESS ASSOCIATION®
1400 Sixteenth Street, N.W.
Suite 600
Washington, D.C. 20036
(202) 785-0081

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SUMMARY

CTIA urges the Commission to find that mobile wireless broadband is being deployed in a reasonable and timely fashion, and, for purposes of Section 706, the Commission should define broadband in a pragmatic way that recognizes the value consumers place on mobile broadband.

The mobile wireless sector is the fastest growing platform for broadband – 98 percent of Americans live in census blocks with either 3G or 4G mobile wireless broadband availability, and in the first six months of 2009, the number of mobile wireless broadband subscribers with download speeds of 768 kbps or greater increased by an astounding 56 percent and comprised more than 74 percent of all new connections in that speed range.. As wireless providers continue to invest heavily in expanding 3G networks and deploying new 4G broadband services, consumers are benefiting significantly – particularly rural, low-income and minority consumers.

In the *Sixth Broadband Deployment Report*, the Commission set forth a definition of broadband for purposes of Section 706 based on a new, higher connection speed – 4 Mbps down / 1 Mbps up – and proposes to maintain that definition in the current proceeding. Although some mobile broadband offerings meet or exceed the defined speed threshold, others do not even though they offer compelling value to consumers. A singular focus on higher and higher speeds is out of touch with consumers' increasing reliance on mobile broadband and fundamentally ignores the enormous benefits of mobility and ubiquitous service. Continuing to consider only speed will hinder the deployment and adoption of the most effective technology for reaching the unserved. Moreover, this narrow approach could undermine universal service reform as well as the Commission's goal of U.S. mobile broadband global leadership. The Commission thus should account for the different broadband mobility technologies in its consideration of broadband.

CTIA firmly believes that the deployment of advanced services, including mobile wireless broadband, is reasonable and timely. The Commission nevertheless should take additional actions that will benefit the deployment, availability, and adoption of mobile broadband. Specifically, the Commission should 1) continue its focus on identifying and bringing to market more spectrum for mobile wireless broadband, as recommended by the National Broadband Plan; 2) preserve the proven deregulatory Title I framework for mobile wireless broadband; 3) reform universal service to meet the consumer demand for mobile wireless broadband; and 4) continue to streamline its regulations affecting infrastructure buildout, including pole attachment reform.

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I. INTRODUCTION

CTIA–The Wireless Association® ("CTIA") submits these comments in response to the Commission's above-captioned Notice of Inquiry "into whether broadband is being deployed to all Americans in a reasonable and timely fashion" pursuant to Section 706 of the Telecommunications Act of 1996.[1] As explained in detail below, the Commission should conclude that mobile wireless broadband is being deployed in a reasonable and timely fashion, and it should define broadband in a pragmatic way that recognizes the value consumers place on mobile broadband.

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[1] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 10-159, *Seventh Broadband Deployment Notice of Inquiry*, FCC 10-148 ¶ 1 (rel. Aug. 6, 2010) ("NOI").

The mobile wireless sector is the fastest growing platform for broadband – 98 percent of Americans live in census blocks with either 3G or 4G mobile wireless broadband availability. Moreover, in the first six months of 2009, the number of mobile wireless subscribers with download speeds of at least 768 kbps *increased by an amazing 56 percent* and comprised *more than 74 percent of all new connections* in that speed range.

The Commission's recent decision to adopt a new throughput level as the sole element for defining broadband for purposes of Section 706 does not account for this reality. Mobility brings broadband *to the person*, and millions of Americans are increasingly relying on mobile service to meet their broadband needs rather than using a broadband service narrowly based on some pre-defined speed, as the Commission's definition presumes. Although some mobile broadband offerings meet or exceed the FCC's recently-defined speed threshold, others do not, even though they offer compelling value to consumers. The Commission, with the adoption of a new throughput minimum, clearly puts a value on speed. Yet consumers, as illustrated in the recent data from the FCC on wireless broadband adoption, also clearly put a value on mobility. CTIA urges the Commission to correct the shortcomings in its current approach and account for mobility in its Section 706 broadband analysis and find that deployment is "reasonable and timely." In any case, as detailed below, the Commission should also take specific actions to lower barriers to further deployment.

II. MOBILE WIRELESS BROADBAND DEPLOYMENT FAR EXCEEDS THE SECTION 706 "REASONABLE AND TIMELY" STANDARD

Wireless service providers are expanding mobile broadband availability across the nation in remarkable and rapid fashion, uniquely benefiting consumers including residents in rural areas, low-income individuals and minority users. This dynamic market, teeming with

investment and innovation, ensures that the U.S. remains the world leader in mobile wireless broadband deployment and usage.

A. Mobile Wireless is the Fastest Growing Platform for Broadband

1. Mobile wireless broadband deployment and usage is explosive

As Chairman Genachowski noted earlier this year, wireless broadband usage is "not just growing, but exploding."[2] New mobile broadband deployment has been dramatic. As of November 2009, more than 98 percent of Americans lived in census blocks covered by 3G and/or 4G service, up from 92.3 percent in May 2008, according to the Commission's recent *Mobile Competition Report.*[3] More than 76 percent of Americans lived in census blocks covered by three or more mobile broadband providers, up from 51 percent in 2008. The Commission has confirmed providers have deployed new and expanded networks using 3G and 4G technologies during this period:

> EV-DO coverage increased six percent from 263 million people, or 92.2 percent of the U.S. population, to 279 million people, or 97.9 percent of the U.S. population. The increase in HSPA coverage was more substantial, growing 42 percent from 153 million POPs (54 percent of the U.S. population) to 217 million POPs (76 percent of the U.S. population). In addition, mobile WiMAX networks, which were effectively non-existent in the Thirteenth Report, now cover approximately 28 million people.[4]

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[2] Julius Genachowski, Chairman, Federal Communications Commission, *Mobile Broadband: A 21st Century Plan for U.S. Competitiveness, Innovation and Job Creation*, at 4 (Feb. 24, 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296490A1.pdf ("Genachowski New America Foundation Remarks").

[3] *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, WT Docket No. 09-66, Fourteenth Report, FCC 10-81 ¶ 120 tbl.13, ¶ 45 tbl.7 (rel. May 20, 2010) ("Fourteenth Wireless Competition Report"); *cf. Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Thirteenth Wireless Competition Report*, WT Docket No. 08-27, Thirteenth Report, 24 FCC Rcd 6185, 6258 ¶¶ 146-47 & tbl.10 (2009).

[4] Fourteenth Wireless Competition Report ¶ 122 (internal citations eliminated).

These networks provide consumers with the capability to stream video or audio, quickly download large files, browse the Internet, and use advanced gaming and social networking applications, among other features. And all these features can be used on-the-go, away from a typical desktop or laptop computer.

The statistics above mark the stunning growth of the wireless industry as carriers have invested heavily in expanding 3G and deploying new 4G broadband networks. By the end of 2009, U.S. wireless carriers' cumulative capital expenditures totaled more than $285 billion, an increase of more than $20 billion from year-end 2008.[5] Indeed, wireless carriers have continued to commit billions of dollars to capital expenditures, despite the current recession. In recent years, these investments have focused heavily on deploying and enhancing 3G and 4G mobile broadband services.

For example, wireless providers continue to steadily upgrade their 3G networks to handle the increased demand for mobile wireless broadband. AT&T has announced plans to deploy High Speed Packet Access ("HSPA") 7.2 technology to 25 of the 30 largest markets by the end of 2010, and expand to 90 percent of its network by 2011.[6] Similarly T-Mobile is continuing to expand its use of HSPA+, a 3.5G technology that can deliver theoretical peak download speeds

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[5] Comments of CTIA–The Wireless Association®, WT Docket No. 10-133, at 6 (filed July 30, 2010) ("CTIA Wireless Competition Comments"). These numbers are conservative estimates of investment, as only incremental investments in currently operational systems are included; investment in greenfield builds are excluded. These numbers also do not include spectrum acquisition costs such as spectrum auction payments, which can be considerable. *See id*. at 66-67.

[6] Press Release, AT&T Inc., AT&T to Make Faster 3G Technology Available in Six Major Cities This Year (Sept. 9, 2009), *available at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=27068; Press Release, AT&T Inc., AT&T Upgrades 3G Technology at Cell Sites Across Nation (Jan. 5, 2010), *available at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=30358.

of 21 Mbps.[7] T-Mobile expects that its HSPA+ network will cover 185 million people by the end of 2010.[8]

Providers also have begun to deploy 4G mobile wireless broadband technology, which offers speeds starting at approximately four times faster than 3G, with the potential for much higher speeds. For example, Clearwire's 4G service now covers 49 markets across the U.S. and 51 million residents, with much more coverage planned.[9] Verizon Wireless, MetroPCS, AT&T, and Cox, among others, have all announced plans for 4G deployments using Long Term Evolution ("LTE") technology. Verizon Wireless is launching LTE in 25 to 30 markets during 2010, covering approximately 100 million residents, and plans to cover its current 3G network by 2013.[10] MetroPCS plans to launch a LTE 4G network in the second half of 2010, starting with cities including Las Vegas, Nevada and Dallas, Texas as early as September 2010.[11] AT&T is doing field trials of LTE, and will begin commercial deployment in 2011.[12] Cox plans to use

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[7] Press Release, T-Mobile USA, Inc., T-Mobile® HSPA+ Network Now Delivers Broadest Reach of 4G Speeds in U.S. (July 21, 2010), *available at* http://press.t-mobile.com/articles/t-mobile-HSPA-4G; Michelle Maisto, *T-Mobile Debuts WebConnect Jet Modem*, Discount Plans, EWEEK.COM, Nov. 11, 2009, http://www.eweek.com/c/a/Desktops-and-Notebooks/TMobile-Debuts-WebConnect-Jet-Modem-Discount-Plans-439524/.

[8] Press Release, T-Mobile USA, Inc., T-Mobile to Rollout the Nation's Fastest 3G Wireless Network With HSPA+ to More than 100 Metropolitan Areas in 2010 (Mar. 24, 2010), *available at* http://press.t-mobile.com/articles/t-mobile-HSPA-3G-network.

[9] Press Release, Clearwire Corp., Clearwire Brings CLEAR4G to Stockton and Modesto (Aug. 2, 2010), *available at* http://newsroom.clearwire.com/phoenix.zhtml?c=214419&p=irol-newsArticle&ID=1454819.

[10] Verizon Wireless, Verizon Wireless LTE Network, https://www.lte.vzw.com/AboutLTE/VerizonWirelessLTENetwork/tabid/6003/Default.aspx (last visited Sept. 2, 2010).

[11] *MetroPCS to launch LTE next month, says Samsung*, Aug. 27, 2010, MOBILE BUSINESS BRIEFING, *available at* http://www.mobilebusinessbriefing.com/article/metropcs-to-launch-lte-next-month-says-samsung.

[12] Press Release, AT&T Inc., AT&T Selects LTE Equipment Suppliers (Feb. 10, 2010), *available at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=30493.

its AWS-1 and 700 MHz spectrum obtained in recent auctions to deploy LTE, which it is testing in Phoenix and San Diego.[13]

Significantly, rural markets are benefiting from mobile wireless broadband deployment. Carriers large and small are deploying mobile broadband services in rural areas across the country. For example, Commnet Wireless, LLC (a subsidiary of Atlantic Tele-Network), together with the Navajo Tribal Utility Authority, recently announced it is developing and will operate a 4G LTE wireless network covering areas of the Navajo Nation in Arizona, New Mexico and Utah which currently have no access to broadband.[14] Alaska Communications Systems ("ACS") and Bluegrass Cellular are offering 3G wireless broadband service in rural areas of Alaska and Kentucky, respectively.[15] And Verizon Wireless announced plans to work with rural companies to build and operate 4G networks in rural areas by using the tower and backhaul assets of the rural company and Verizon Wireless' core LTE equipment and 700MHz spectrum.[16] Cellular South also provides 3G high-speed mobile wireless broadband in rural areas of 10 states, has nearly 450 cell sites with 3G high-speed data capacity, invested more than $530 million in network infrastructure since 2006, and acquired 700 MHz licenses covering the

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[13] Press Release, Cox Communications, Cox Successfully Demonstrates the Delivery of Voice Calling, High Definition Video Via 4G Wireless Technology (Jan. 25, 2010), *available at* http://cox.mediaroom.com/index.php?s=43&item=469.

[14] Press Release, Atlantic Tele-Network, Inc., Stimulus Grant Will Allow Commnet Wireless to Advance Rural Broadband Wireless (Apr. 5, 2010), *available at* http://ir.atni.com/releasedetail.cfm?ReleaseID=456820.

[15] *See* Press Release, Alaska Communications Systems, ACS Named "Best Wireless Provider" in Leading Alaska Survey (Aug. 31, 2009), *available at* http://investors.alsk.com/releasedetail.cfm?ReleaseID=406087; *see, e.g.* Press Release, Blue Grass Cellular, Bluegrass Cellular Expands High-speed Coverage in LaRue County (July 28, 2009), *available at* http://bluegrasscellular.com/about/news/bluegrass_cellular_expands_high_speed_coverage_in_larue_county.

[16] Verizon Wireless, LTE in Rural America, http://aboutus.vzw.com/rural/Overview.html (last visited Sept. 2, 2010).

vast majority of Mississippi, Tennessee, and Alabama with which it will provide 4G LTE service.[17] Thus, rural areas are directly benefiting from the cost-effective delivery of mobile wireless broadband, and mobile broadband network coverage is continuing to expand.

Again, while some of these deployments meet or will meet the Section 706 speed threshold, some others do not – and as discussed further below, it is unreasonable to exclude these valued mobile broadband offerings from the broadband definition for Section 706 purposes or any other.

2. American consumers, and low-income and minority consumers in particular, are benefiting from mobile wireless broadband availability

Consumers are embracing mobile broadband faster than any other broadband platform. Indeed, in a report released just last week, the Commission found that over the first six months of 2009, not only did the number of mobile wireless subscribers with download speeds of at least 768 kbps *increase by an astounding 56 percent*, they also accounted for *more than 74 percent of all new connections* in that speed range.[18]

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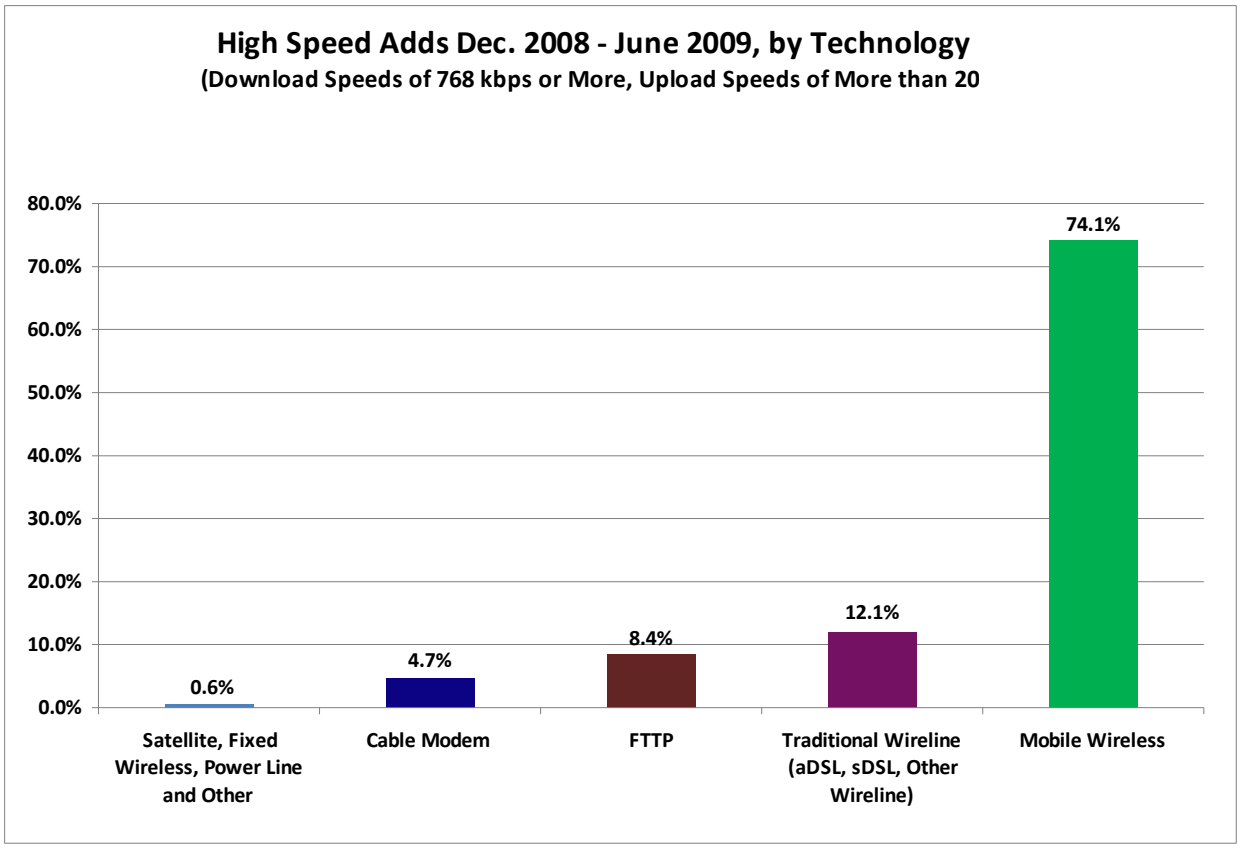
[17] *See* Comments of Cellular South, Inc., WT Docket No. 05-265, at 1 (filed June 14, 2010) ("[Cellular South] is a regional carrier serving more than 800,000 customers, primarily in rural areas."); Cellular South Inc., About Us, https://www.cellularsouth.com/aboutus/index.html (last visited Sept. 2, 2010).

[18] *Compare* Federal Communications Commission, Wireline Telecommunications Bureau, Industry Analysis and Technology Division, *Internet Access Services: Status as of June 2009*, at 13 Table 6 (Sept. 2010) (providing approximately 16 million mobile wireless connections with download speeds of 768 kbps or greater) *with* Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, *High-Speed Services for Internet Access: Status as of December 31, 2008*, at 16, Table 6 (Feb. 2010) (providing approximately 10 million mobile wireless connections with download speeds of 768 kbps or greater paired with upload speeds of more than 200 kbps).



Source: FCC Internet Access Services Data

And, consumers are increasingly taking advantage of these networks. AT&T alone reported a 5,000 percent increase in wireless broadband usage over the past 3 years.[19] More broadly, U.S. wireless carriers reported carrying 107.8 billion MB of data traffic in the last six months of 2009.[20] Analysts generally agree that mobile wireless broadband usage will continue

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[19] Genachowski New America Foundation Remarks at 4; *see also* CISCO SYSTEMS, INC., CISCO VISUAL NETWORKING INDEX: GLOBAL MOBILE DATA TRAFFIC FORECAST UPDATE, 2009-2014, at 2 (Feb. 9, 2010) ("Cisco VNI Report").

[20] DR. ROBERT F. ROCHE & LESLEY O'NEILL, CTIA, CTIA'S WIRELESS INDUSTRY INDICES 10 (May 2010) (providing year-end 2009 results) ("CTIA's YE2009 Report"). This amount of data is approximately 1.2 times the estimated total content of every single website on the Internet. *See* Wolfram|Alpha Computational Knowledge Engine, http://www.wolframalpha.com/input/?i=107.8+billion+MB (characterizing this amount as "1.2 × estimated data content of the deep web." The "deep web" represents the full content of the web) (last visited Sept. 2, 2010).

to explode, with Cisco predicting that "globally, mobile data traffic will double every year through 2014, increasing 39 times between 2009 and 2014."[21]

While overall broadband usage continues to grow, the National Broadband Plan expresses concern regarding the lower home broadband adoption rates of certain demographic groups in the U.S., such as individuals with low incomes and racial and ethnic minorities.[22] Wireless can be, and is becoming, a solution to those concerns. According to a recent report from the Pew Internet and American Life Project, low-income groups in the U.S. are now the fastest growing group of wireless Internet adopters, up to 46 percent from 35 percent in April 2009.[23]

Additionally, 54 percent of African-Americans and 53 percent of English-speaking Hispanics access the Internet over their mobile phones, compared to 35 percent of Caucasians.[24] And 17 percent of those who earn less than $30,000 per year, 20 percent of those who have not graduated from high school, and 15 percent of those who have graduated high school but have not attended college, connect to the Internet solely through a mobile wireless connection.[25] Additionally, African-Americans and English-speaking Latinos continue to be among the most

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[21] Cisco VNI Report at 1.

[22] FEDERAL COMMUNICATIONS COMMISSION, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 167 (2010), *available at* http://www.broadband.gov/download-plan/ ("National Broadband Plan").

[23] AARON SMITH, PEW INTERNET & AMERICAN LIFE PROJECT, MOBILE ACCESS 2010 at 9 (July 7, 2010) ("Pew Mobile Access 2010 Report"), *available at* http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx; *see also* Matt Hamblan, *Pew study finds rapid increase in mobile Internet use by low-income Americans*, NETWORK WORLD, July 9, 2010, http://www.networkworld.com/news/2010/070910-pew-study-finds-rapid-increase.html?hpg1=bn.

[24] Pew Mobile Access 2010 Report at 10. The survey did not cover Spanish-speaking Hispanics.

[25] *Id.*

active users of the mobile web.[26] Cell phone ownership is higher among African-Americans and Hispanics than among Caucasians (87 percent vs. 80 percent), and minority cell phone owners use a much greater range of their phones' features compared with Caucasian mobile phone use.[27] These mobile devices, with their ever-increasing capabilities, are bringing broadband Internet access to individuals in novel and expanding ways. In this way, the mobile platform is delivering broadband availability to those that otherwise might not access it. Using a speed threshold that does not recognize this incredible story seems counterintuitive.

B. The U.S. Leads the World in Mobile Wireless Broadband Deployment and Adoption

Given the above, it should come as no surprise that the U.S. has world-class deployment of mobile wireless broadband, as measured in subscribers and investment dollars. While the U.S. accounts for only 6 percent of the world's total wireless subscribers, the U.S. has more than 21 percent of the world's 3G subscribers, and has more 3G subscribers than the combined total of 3G subscribers in the five largest European countries.[28] The U.S. also leads the world in wireless network investment: in 2009, U.S. wireless providers invested $20.4 billion in their currently operational networks alone, compared to $17.9 billion invested by wireless providers in the five largest European countries combined.[29]

With the explosive growth of mobile broadband – in terms of deployment, expansion of service and new coverage, and consumers' increasing reliance on the mobile broadband platform – the Commission must find that mobile broadband availability is "reasonable and timely."

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[26] *Id.* at 15.
[27] *Id.* at 16.
[28] CTIA Wireless Competition Comments at 62.
[29] *Id.* at 61-62.

III. THE COMMISSION MUST EVALUATE BROADBAND THE WAY CONSUMERS USE IT

In order to assess whether broadband is being deployed to all Americans in a reasonable and timely fashion, it is imperative to consider how Americans use and access broadband. A solitary focus on higher and higher speeds ignores the enormous benefits of mobility. As the previous section demonstrates, consumers' increasing reliance on mobile broadband requires that the mobile platform be a critical component of any discussion of broadband deployment.

A. Broadband Should be Defined Across Multiple Dimensions, Including Mobility

In the *Sixth Broadband Deployment Report*, the Commission set forth a definition of broadband for purposes of Section 706 based on a new, higher connection speed – 4 Mbps down / 1 Mbps up.[30] This singular focus does not reflect what many consumers consider to be important in the provision of broadband – mobility – or how they use broadband. Consumers often want mobility, and are in many cases willing to trade some speed for the freedom of a ubiquitous connection – while still able to stream video or audio, quickly download large files, browse the Internet, and use advanced gaming and social networking applications, among other features. An exclusive focus on speeds of 4 Mbps down / 1 Mbps up simply ignores this reality, and the Commission instead should account for mobility in its consideration of broadband.

Mobility adds an entire new dimension to Internet access – the ability to access email anywhere, for example, or to read news websites wherever one may be, are major benefits of mobile wireless access. In addition, many Internet applications can be more useful when

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[30] Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket Nos. 09-137, 09-51, *Sixth Broadband Deployment Report*, FCC 10-129 ¶ 11 (rel. July 20, 2010) ("Sixth Broadband Deployment Report").

accessed over a mobile connection: consider mapping applications such as Google Maps, which one can update while travelling, or Amazon.com's Kindle device, which enables mobile wireless access to a portable, enormous, electronic bookstore. Moreover, mobility is a core functionality of other applications such as remote monitoring of patients ("mHealth"), mobile device integration in educational coursework for students ("mLearning"), geocaching, location-based "check-in" applications like FourSquare, and mobile shopping applications. Additionally, mobile communications have significant Public Safety benefits for our nation's first responders.

Mobile wireless broadband offers consumers other unique benefits as well. Mobile broadband is available in areas where no individuals may live, such as along highways, and in recreational parks, airports, and business districts.[31] A wired-oriented (or an adoption-based approach to Section 706) would mistakenly conclude that broadband was not available in such places.

Considering broadband in a manner that largely excludes the unique attributes of mobility imposes a single, provincial view of what broadband communications ought to look like. As increasing numbers of Americans go online through their wireless mobile broadband connections, a speed-centric evaluation will be increasingly out of touch with how consumers actually use broadband. Further, simply measuring speed does not necessarily correspond to the user's broadband experience. The Commission's speed-centric approach ignores the close integration of wireless devices and the transport and data processing functions these devices

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[31] For example, a CostQuest model commissioned by CTIA in 2008 revealed that 42% of road miles in the United States had no mobile broadband coverage. COSTQUEST ASSOCIATES, U.S. UBIQUITOUS MOBILITY STUDY: IDENTIFICATION OF AND ESTIMATED INITIAL INVESTMENTS TO DEPLOY THIRD GENERATION MOBILE BROADBAND NETWORKS IN UNSERVED AND UNDERSERVED AREAS 4 (April 17, 2008), *attachment to* Comments of CTIA–The Wireless Association®, WC Docket No. 05-337 (filed April 17, 2008).

enable in the wireless ecosystem. How network resources are consumed by the end user in a wireless network varies based on a number of factors, including the device itself. Wireless carriers, infrastructure suppliers, device manufacturers, operating system developers and applications providers work closely to ensure that devices and applications are optimized to provide the best broadband experience possible while accommodating devices and networks.[32] Thus, a more pragmatic and inclusive definition is required.

B. Ignoring Mobility Could Hinder the Deployment and Adoption of the Most Economical Technology for Reaching the Unserved

The Commission has suggested that its revised universal service programs will be central elements in its effort to ensure the reasonable and timely deployment of broadband to all Americans.[33] The proposed reforms include, *inter alia*, the creation of a Mobility Fund and a Connect America Fund to provide explicit support for broadband deployment in areas where such deployment would otherwise be uneconomic.[34]

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[32] *See, e.g., CNN Unveils iPhone App with iReport*, PC Magazine, Sept. 28, 2009, *available at* http://www.pcmag.com/article2/0,2817,2353442,00.asp (quoting CNN representative speaking of the company's optimized mobile device application and stating "mobile is just as compelling a delivery platform as online, TV, or radio," … "It's just that it has different characteristics. On the one hand, it has a smaller screen, but on the other hand, it goes around with everywhere wherever they go.").

[33] *See, e.g., Sixth Broadband Deployment Report* ¶ 29 n.124, *citing* National Broadband Plan at xi-xv (Executive Summary, including recommendations to reform universal service program).

[34] National Broadband Plan at 145-146, Recs. 8.2, 8.3. This type of support could address the concerns Senator Rockefeller highlighted in his recent letter to the Commission discussing the Upper Big Branch mine tragedy and the hardship caused during that tragedy by a lack of mobile communications at the site. According to Senator Rockefeller, the disaster "demonstrated with painful clarity the gaps in our communications infrastructure and the pressing need for reform," and stating that "[e]veryone in this country … deserves access to modern communications services, including broadband and wireless services." Letter from Sen. John D. Rockefeller, IV, Chairman, U.S. Senate Committee on Commerce, Science and Transportation, to the Julius Genachowski, Chairman, FCC, 2 (Aug. 2, 2010).

To the extent the Commission relies on its Section 706 findings to reform its universal service programs or to pursue other initiatives, however, faulty premises regarding what consumers value in broadband services could have serious negative effects and threaten the Commission's long-standing universal service principle of technological neutrality. At minimum, the Section 706 report cannot be a tool to help measure the success of the revised universal service programs if it does not reveal the availability of *mobile* broadband – as used by consumers – in all parts of the country. Worse still, if eligibility for universal service support parallels the approach proposed for the Section 706 report, which is based solely on speed and therefore, in our view, incorrect, the Commission risks undermining its own goals for broadband deployment and adoption by limiting wireless providers' ability to be part of the broadband solution. This is particularly troubling given that wireless is a far more cost-effective method to deploy services, as the Commission's own Broadband Gap model concludes.[35]

Mobile wireless broadband is also well-suited to address cost-based adoption challenges. For example, for low income individuals who are proportionally early adopters and heavy users of wireless services,[36] the incremental cost of adding wireless broadband service to their already existing services may be less expensive than adding an entire new fixed broadband service. Another price savings is in the consumer premises equipment required to access broadband, as wireless providers offer heavily subsidized smartphone devices and netbooks that can be a less costly means to access the Internet. Additionally, some mobile wireless broadband providers are

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[35] FEDERAL COMMUNICATIONS COMMISSION, THE BROADBAND AVAILABILITY GAP 61 (April 2010) ("Wireless solutions are among the lowest cost solutions and wireless costs grow less quickly as density falls.").

[36] Pew Mobile Access 2010 Report at 10, 15.

now offering prepaid plans, which could further attract cost-conscious consumers.[37] These varying offers reflect a competitive market seeking to serve varying consumer needs.

C. An Unnecessarily Narrow Definition of Broadband Undermines the NBP Goal of Being the Global Leader in Mobile Wireless Broadband

Finally, one of the six major goals of the National Broadband Plan is that "[t]he United States … lead the world in mobile innovation, with the fastest and most extensive wireless networks of any nation."[38] As noted above, an overly narrow definition of broadband that fails to recognize the value of mobility risks leaving mobile wireless broadband out of major broadband policy efforts, including universal service reform. It undermines the purpose of Section 706 to ensure reasonable and timely deployment of broadband, and works against the Commission's goal of maintaining the U.S.'s global lead in mobile wireless broadband. The Commission must broaden the definition of broadband for Section 706 purposes to include mobile broadband services that Americans increasingly demand.

IV. BROADBAND AVAILABILITY IS REASONABLE AND TIMELY, BUT THE COMMISSION CAN NONETHELESS TAKE CERTAIN ACTIONS THAT WILL REDUCE BARRIERS TO FURTHER DEPLOYMENT

CTIA firmly believes that the deployment of advanced services, including mobile wireless broadband, is reasonable and timely but identifies below Commission actions that will nevertheless benefit the deployment, availability, and adoption of mobile broadband.

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[37] Press Release, Clearwire Corp., Clearwire Introduces Rover: Instant Gratification to the Internet Addicted (Aug. 30, 2010) ("Rover [is] the nation's first pay-as-you-go 4G mobile broadband service."). *See also* National Broadband Plan at 168 ("9% [of surveyed non-adopters] say they do not want the financial commitment of a long-term service contract or find the installation fee too high.").

[38] National Broadband Plan at xiv.

A. The Commission Should Continue Its Focus on Making More Spectrum Available for Wireless Broadband

As Chairman Genachowski has noted, "[w]ithout sufficient spectrum, we will starve mobile broadband of the nourishment it needs to thrive as a platform for innovation, job creation and economic growth."[39] The National Broadband Plan, and more recently an Obama Administration Presidential Memorandum, have called for 500 MHz of additional spectrum for mobile wireless broadband over the next ten years.[40] CTIA applauds the efforts of the Commission and the Administration to address this critical issue, and encourages the Commission to work with stakeholders to rapidly free up the spectrum necessary to achieve its goal.

B. Preserve the Proven Deregulatory Title I Framework for Mobile Wireless Broadband

The Commission should continue with the light regulatory touch of wireless mobile broadband under Title I, which has fostered exactly the sort of market the Commission is striving for in all of the services it regulates – one that is driven by competition, the hallmarks of which are investment, innovation and a diverse menu of services and products for consumers.

CTIA will take the opportunity presented in the Commission's recent Public Notice to continue to educate policy makers as to why wireless is different. Either a full Title II or "Third Way" approach would impose a heavy regulatory burden and would choke innovation and investment in the mobile broadband market. Title II regulation is a construct of monopoly-era public utility regulation, and is premised upon onerous rate and entry regulation. Likewise, the

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[39] Genachowski New America Foundation Remarks at 4.

[40] National Broadband Plan at xii; Presidential Memorandum: Unleashing the Wireless Broadband Revolution, June 28, 2010, *available at* http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution.

"Third Way" proposal, even assuming the proposed provisions were forborne permanently, consists of a heavy regulatory framework unlike anything that currently governs broadband operators.[41] The new regulatory regime also would increase regulatory uncertainty and reduce providers' incentives to risk investing in deployment. Either of these approaches would ensnare the Commission in a never-ending series of debates about unjust and unreasonable practices, and the machinery of the administrative process would limit providers' ability to quickly introduce new services, new products, or new pricing models, significantly harming their ability to respond competitively to changes in the marketplace. Ultimately, these effects would directly undermine the Commission's broadband deployment goals.

C. The FCC Should Work to Reform Universal Service to Reflect Consumer Demand For, and the Benefits of, Mobile Wireless Broadband

As the Commission has acknowledged, a reformed universal service fund will be a key tool for achieving national broadband deployment goals.[42] In order for the universal service fund to serve this function, however, reform must both maintain and advance the United States' mobile broadband leadership and fulfill Section 254's mandate that it ensure access to those "reasonably comparable" mobile broadband services that consumers demand.[43] To do this, the Commission must adopt long-term reforms that are competitively- and technologically-neutral and ensure sufficient support (including on-going support) for the unique attributes and functionalities of mobile broadband services.

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[41] Comments of CTIA–The Wireless Association®, GN Docket No. 10-127, at 38-40 (filed July 15, 2010) ("CTIA Third Way Comments").

[42] Sixth Broadband Deployment Report ¶ 29 n.124, *citing* National Broadband Plan at xi-xv (Executive Summary, including recommendations to reform universal service program). *See also* National Broadband Plan at 140 (discussing the need for universal service reform).

[43] 47 U.S.C. § 254(b)(3).

The Commission has proposed separate Connect America and Mobility Funds, but must clarify how these funds will work together to support mobile wireless broadband.[44] In particular, the proposed Mobility Fund would not fund on-going operational expenses, meaning that only one-time deployment costs would be covered.[45] Yet mobile wireless broadband services could be ineligible for the Connect America fund, if the Commission continues its single-minded focus on speed in analyzing broadband services and maintains the existing minimum speed cutoff. These issues must be addressed in order for Universal Service reform to be an effective tool for the continued expansion of mobile broadband.

D. Continue Leadership in Streamlined Regulation of Infrastructure Buildout

In November 2009, the Commission issued the "Shot Clock" declaratory ruling establishing a framework for more streamlined processing of local zoning applications for antenna siting.[46] CTIA again commends the Commission for that decision, and for the recent order denying a petition for reconsideration.[47] The Commission should continue its leadership in streamlining infrastructure buildout by reforming pole attachment regulations to promote wireless broadband deployment.

Timely access to electric utility poles at reasonable, cost-based rates is another important component of mobile wireless broadband deployment. The Commission's proposed federal

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[44] Comments of CTIA–The Wireless Association®, WC Docket No. 05-337, at 22-23 (filed Apr. 17, 2008) ("CTIA High Cost Comments").

[45] National Broadband Plan at 146, Rec. 8.3. *See also* CTIA High Cost Comments at 23.

[46] In the Matter of Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review, WT Docket No. 08-165, *Declaratory Ruling*, 24 FCC Rcd 13994 (2009).

[47] In the Matter of Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review, WT Docket No. 08-165, *Order on Reconsideration*, FCC 10-144 (rel. Aug. 4, 2010).

make-ready access timeline and accompanying enforcement regime and rate structure provide a generally workable framework.[48] With certain modifications, these proposals can achieve the correct balance between (1) ensuring the integrity of the poles and attachments and providing just and reasonable compensation for the use of the pole, and (2) facilitating nondiscriminatory wireless pole access at reasonable rates. Specifically, as CTIA asserted in its comments to the proposal, the Commission should implement a shorter timeline for wireless attachments including distributed antenna systems ("DAS") because such systems often are inherently smaller-scale than wireline or cable build-outs.[49] The Commission also should further strengthen its enforcement mechanisms to ensure the effectiveness of any new rules.[50] Finally, the Commission should adopt a pole attachment rate that is both uniform and low.[51]

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[48] In the Matter of Implementation of Section 224 of the Act; A National Broadband Plan for Our Future, *Order & Further Notice of Proposed Rulemaking*, WC Docket No. 07-245, GN Docket No. 09-51, FCC 10-84 (rel. May 20, 2010).

[49] *See* Comments of CTIA–The Wireless Association®, WC Docket No. 07-245, GN Docket No. 09-51, at 6-9 (filed Aug. 16, 2010).

[50] *Id.* at 11-16.

[51] *Id.* at 16-17.

CONCLUSION

For the above reasons, the Commission must consider mobility as an essential component of its definition of broadband for purposes of the Section 706 analysis, and must therefore conclude that the deployment of mobile wireless broadband is both reasonable and timely.

Respectfully submitted,

By: */s/ Brian M. Josef*

Brian M. Josef
Director, Regulatory Affairs

Michael F. Altschul
Senior Vice President and General Counsel

Christopher Guttman-McCabe
Vice President, Regulatory Affairs

CTIA-The Wireless Association®
1400 Sixteenth Street, NW, Suite 600
Washington, DC 20036
(202) 785-0081

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